

A Monthly Bulletin on Epidemiology & Public Health Practice in Washington State

# Pesticide Exposure, at Work or Around the Home, Can Cause Serious Illness and Is a Reportable Condition

Pesticide poisoning can have serious health consequences ranging from eye, skin, and throat irritation to chest pain, difficulty breathing, and other life-threatening symptoms (Table 1). Pesticide illness is a reportable condition, but health care providers may not readily recognize symptoms, which may be similar to many common maladies. A recently published report by Washington State Department of Health (DOH) indicates that 69% of reported pesticide illnesses in 1995 were occupational, and 28% occurred in the home.

## TABLE 1: Commonly reported symptoms of pesticide poisoning

Irritation of eyes, skin, and throat
Itch, allergy, and skin rash
Blurry vision
Dizziness
Excessive sweating and/or salivation
Vomiting and diarrhea
Chest pain
Muscle pain
Stomachache and cramps
Difficulty breathing

Encouraging news in the most recent annual report of the Pesticide Incident Reporting and Tracking (PIRT) Review Panel is that DOH staff have observed a decrease in the seriousness of reported complaints, especially for occupational related cases. Factors contributing to this decline may be increased awareness of risks associated with pesticide exposure, increased regulatory activity, and a reduction in the use of highly toxic chemicals.

The report is a compilation and analysis of pesticide-related investigations con-

ducted by the departments of Agriculture (WSDA), Health (DOH), and Labor and Industries (L&I). In 1995, DOH investigated 399 incidents involving 503 persons, WSDA investigated 259 complaints, and L&I Consultation and Compliance Services Division conducted 24 investigations.

Clinicians should be aware that children also can be at risk for pesticide exposures. Children less than nineteen years of age accounted for 53 (11%) of the 503 individual cases investigated. Six children were under the age of six, four were ages 6–10, and six were ages 11–14. Eleven were boys and five were girls. Thirty-four of the 53 childhood cases occurred in the home (including 11 associated with nearby agicultural uses), and five were occupational, primarily agriculture-related. Sixteen of the 53 cases were determined to be definitely, probably, or possibly related to pesticides and two of the 16 required hospitalization.

The information below summarizes the 216 DOH cases classified definitely, probably, or possibly related to pesticide exposure in 1995. Classification is based on documentation of exposure, medical records review, and case investigation.

King and Yakima Counties reported the highest number of cases, 31 each, although the rate based on population is higher in Yakima County at 1.5 cases per 10,000 population. As in prior years, insecticides were the pesticide most often involved with

Continued page 2

Enjoy a Safe & Healthy Holiday Season

(tips on page 2)

Vol. 2 No. 12

In This Issue:

**Holiday Tips** Page 2

Shellfish Bed Closures Page 2

Monthly Surveillance Data Page 3

**News Briefs** Page 4

Calendar Page 4

**WWW Access Tips** Page 4

#### **Pesticide Information**

For case management, emergency consultation, and compliance reporting, call:

> Washington Poison Center 1-800-732-6985

Educational materials are available from DOH: 360-753-3518

### Pesticides (from page 1)

illness. Combinations versus single-use pesticides were more frequently implicated. Forty-two percent of cases occurred from an agricultural exposure (Table 2) and 55% of those occurred in the fruit production industry, which is highly labor intensive and requires a significant pesticide usage.

In 1995 DOH applied a severity rating with a 01 to 06 scale to provide information on the seriousness of the reported illness. Ninety-four of the cases were rated 03 or greater. A severity of 03 indicates moderate topical, eye, or other symptoms. Four cases had a severity rating of 04 and one of 05.

The Washington Poison Center can assist with case management and compliance with the mandatory requirement to report pesticide illness; call 1-800-732-6985. Health care providers should ask patients who suspect pesticide illness to bring in the product label, which can provide important

TABLE 2: Pesticide incidents (216) classified by the Department of Health in 1995

Type of Activity	# of Cases	(%)
Agriculture Commercial/industrial Residential environment Other	90 74 40 12	(42) (34) (18) (6)
Source of Exposure		
Direct exposure to pesticide or residue Pesticide drift Other	169 35 12	(78) (16) (6)

toxicological information, active ingredients, and an emergency number.

For information on the Pesticide Incident Report or additional educational material, please call DOH at 360-753-3518.

# 'Tis the Season for Celebration . . . and Extra Attention to Safety Measures

The holidays are a time for fun and celebration. Along with greetings and good wishes, health care practitioners and public health educators can offer the following holiday health and safety tips to patients and clients.

At Home: Holiday decorations and home heaters can cause house fires. Check wiring, avoid overloading circuits, extinguish candles before going to bed, and keep flammable material away from portable or baseboard heaters.

### Several Shellfish Beds Closed Due to "Red Tide"

Several shellfish beds in Puget Sound and on the Pacific coast have been closed in the past three to four weeks after tests indicated harmful levels of paralytic shellfish poison (PSP), also known as red tide, an unusual problem at this time of year.

Samples taken from blue mussels in Case Inlet in Mason and Pierce counties show extremely high PSP levels of 6,799 micrograms per 100 grams of shellfish. The maximum allowable limit for PSP toxin is only 80 micrograms per 100 grams of shellfish tissue.

Recreational harvesters should call the Biotoxin Hotline at 1-800-562-5632 before harvesting any shellfish in Washington, or check the World Wide Web for information about current closures: http://www.doh.wa.gov/ehp/sf/biotoxin.htm

On the Road: Seat belt reminders are appropriate for family, friends, and patients. Children riding in cars with air bags should sit in the back seat. Alcohol-related crashes are an avoidable holiday tragedy and can be prevented if party-goers assign a designated (nondrinking) driver. Party hosts should be alert for intoxicated guests and urge them to stay out of the driver's seat; call a taxi to ensure a safe ride home.

Enjoy Holiday Food in Good Health: Keep hot food hot and cold food cold, particularly at buffets or long parties. Avoid recipes with uncooked eggs. Party hosts might consider serving tasty low-fat and nutritious goodies along with sweet, high-indulgence treats.

*Gift Idea:* A helmet for the bike-riding family member or friend who lacks one.

Holiday Travel Abroad: Information for international travelers is available online from the Centers for Disease Control and Prevention at: http://www.cdc.gov/travel/travel.html. This site includes information about disease outbreaks, recommendations for immunization by geographic area, and advice for health care providers regarding administration of immunizations.

Have a safe & healthy holiday season!

# **Monthly Surveillance Data by County**

November 1997\* - Washington State Department of Health

							, c	Pailis .	Disease						
		0151:H1	ella		A	:iS	NOTE HE	Melindrocca Disease Interculois			ii <sup>3</sup> .e <sup>3</sup>			Pesticides Lé	
County	<b>4</b> .cs	di Olistiki Salm	onella Shig	Hepati	Hepat Hepat	in Mou-	", Medi	ug. Set	uss. In	ercu. Chi	rnydia Gor	orhea AIDS	900	sticides.	
Adams	0	0	0	0	0	0	0	0	0	2	0	0	1	0/0	
Asotin	0	0	0	0	0	0	0	0	0	6	0	0	0	0/0	
Benton	0	2	0	0	0	0	0	0	2	1	0	1	0	0/3	
Chelan	0	0	2	0	0	0	0	0	0	5	0	0	1	3/3	
Clallam	0	0	0	0	0	0	0	0	0	5	1	0	1	0/	
Clark	1	3	1	5	2	1	3	5	1	55	2	2	0	0/	
Columbia	0	0	0	0	0	0	0	0	0	0	0	0	0	0/	
Cowlitz	0	1	0	2	1	1	1	0	0	6	0	1	0	0/1	
Douglas	0	0	0	0	0	0	0	0	0	3	0	0	1	0/	
Ferry	0	0	0	0	0	0	0	0	0	3	0	0	0	0/	
Franklin	0	3	0	0	0	0	0	0	0	0	0	0	0	0/	
Garfield	0	0	0	0	0	0	0	0	0	0	0	0	0	0/	
Grant	1	0	0	1	0	0	0	0	0	14	2	0	2	0/	
Grays Harbor	0	0	0	0	0	0	0	0	0	8	0	0	0	0/	
Island	0	0	0	1	0	0	0	0	0	8	1	0	0	0/	
Jefferson	0	0	0	0	0	0	0	0	1	1	0	0	0	0/	
King	5	26	9	0**	0**	0**	1	30	10	267	73	20	3	2/2	
Kitsap	0	1	0	0	0	0	0	1	0	24	4	0	1	1/2	
Kittitas	0	0	0	1	0	0	0	0	0	5	0	0	0	1/	
Klickitat	0	0	0	0	0	0	0	0	0	2	0	0	0	1/	
Lewis	0	0	0	0	0	0	0	0	0	6	0	1	0	0/	
Lincoln	0	0	0	0	0	0	0	0	0	0	0	0	0	0/	
Mason	0	0	0	0	0	0	1	1	0	7	1	0	0	0/	
Okanogan	0	0	0	0	0	0	0	0	0	0	1	0	0	0/	
Pacific	0	0	0	0	0	0	0	0	0	1	0	0	0	0/	
Pend Oreille	0	0	0	0	0	0	0	0	0	0	0	0	0	0/	
Pierce	2	5	2	10	1	0	0	3	1	108	23	2	0	2/10	
San Juan	0	0	0	0	0	0	0	0	0	1	0	0	0	0/	
Skagit	0	1	0	1	0	0	0	0	1	12	0	0	0	0/	
Skamania	0	0	0	0	0	0	0	0	0	0	0	0	0	0/	
Snohomish	2	2	0	1	0	0	0	0	2	51	6	7	0	1/	
Spokane	2	5	0	19	0	0	0	0	2	70	16	0	3	3/1	
Stevens	0	0	0	0	0	0	0	0	0	2	0	1	0	0/	
Thurston	0	0	0	0	0	0	0	0	0	31	0	0	0	0/	
Wahkiakum	0	0	0	0	0	0	0	0	0	0	0	0	0	0/	
Walla Walla	0	0	1	0	0	0	0	0	0	9	1	0	0	1/	
Whatcom	1	0	4	4	0	0	0	2	1	23	1	1	0	0/	
Whitman	0	0	0	0	0	0	0	0	0	0	0	0	0	0/	
Yakima	0	0	0	2	1	0	1	0	2	43	2	0	7	2/1	
Unknown														0/	
urrent Month	14	49	19	47	5	2	7	42	23	779	134	36	20	17/32	
October 1996	49	55	39	110	12	1	4	119	20	671	147	72	9	14/29	
1997 to date	121	564	250	606	73	26	85	370	279	8510	1773	560	364	164/408	
1997 to date 1996 to date	151	550	250 254	691	73 97	50	92	660	257	8661	1905	641	394	171/500	
1/70 to uate	131	JJU	254	U7I	71	JU	7∠	UUU	231	0001	1700	U <del>4</del> I	J 74	171/300	

<sup>\*</sup> Data are provisional based on reports received as of November 30, unless otherwise noted.

† Unconfirmed reports of illness associated with pesticide exposure.

§# Number of elevated tests (data include unconfirmed reports) / total tests performed (not number of children tested); number of tests per county indicates county of health care provider, not county of residence for children tested; # means fewer than 5 tests performed, number omitted for confidentiality reasons.

\*\* Data are not available for November.



### WWW **Access Tips**

The Northwest Center for Public Health Practice maintains a Web site that lists meetings, hearings, training opportunities, and other events related to public health practice in Washington. The address is: www://healthlinks.washington.edu/nwcphp/cal

#### **Questions? Comments?**

If you have a question about epidemiologic or public health issues, contact the editors at the address on the mailing panel or by email at function@u.washington.edu

### State Cancer Registry Report for 1994 Now Available

The Annual Report of the Washington State Cancer Registry is now available from the Department of Health. This resource book provides information on the 24 most frequently diagnosed types of cancer in Washington, with a focus on cases newly diagnosed in 1994.

Cancer is the most common cause of death among adults aged 35 to 74 years and is responsible for 25% of deaths among state residents. About 25,000 new cases of cancer in occurred in Washington in 1994; the most common cancer types are breast, prostate, lung, colorectal, and melanoma.

The 1994 data include incidence and mortality, stage at diagnosis, age- and gender-specific incidence, and regional incidence and mortality. The sections on

annual trends and on county-specific incidence and mortality include additional years of data. To request copies, contact Carolyn Comeau at (360) 664-8776. DOH plans to release 1995 data and place cancer data on the DOH Web site early in January.

### **FDA Approves Meat Irradiation**

The Food and Drug Administration has approved irradiation of fresh or frozen meats such as beef, lamb, and pork. The FDA has concluded irradiation is effective for controlling pathogenic organisms and does not compromise the nutritional quality of treated products. Irradiation should be combined with safe food handling to prevent foodborne illnesses.

### Conferences, Courses & Meetings

January 30 9am-noon Olympia

Ambulatory/Outpatient Data Collection Feasibility Study — Meeting of the Policy Advisory Group; *Location*: first floor conference room, 1102 SE Quince St., Olympia. For directions and further information, contact Hank Brown at 360-705-6000.

Chehalis Seattle Richland March 11

January 13 February 10

All workshops 8:30-4:30

Rabies Prevention and Control Workshops — DOH conducts these workshops for local public health personnel, veterinarians, animal control officers, wildlife rehabilitators, and other interested persons. The morning session is a review of human and animal rabies cases in Washington State and the U.S. and covers epidemiology, vaccination recommendations, and animal testing. The afternoon is an open session for questions and discussion focused on rabies prevention and recommendations based on the 1997 experience. *Locations* — Chehalis: Courthouse Annex, Room 1, 345 W. Main; Seattle: NOAA, Building 9 Auditorium, 7600 Sandpoint Way NE; Richland: Federal Building Auditorium, 8245 Jadwin Ave. For more information contact John Grendon at 360-586-5379 or jhg0303@hub.doh.wa.gov.

Dept. of Printing Washington State **DIA9** J.S. Postage **BULK RATE** 

2187-40289 AW .sigmyIO P.O. Box 47812 *EPITRENDS* 



at: www.doh.wa.gov Department of Health web site epiTRENDS is posted on the

> Scientific Editor Marcia J. Goldoff, MD, MPH Managing Editor Sandra L. Marvinney, BA State Epidemiologist Paul Stehr-Green, DrPH, MPH

> > State Health Officer Deputy Secretary and Mimi L. Fields, MD, MPH

Bruce Miyahara, MHA

Department of Health. the Washington State is published monthly by *⇔*ЫЦВЕИD2